SBR No : 09
Date : 29.5.2017

BR No : 09
Date : 30.5.2017

Original Duplicate Triplicate

CONTRACT CERTIFICATE

(For Other Works)

No. 1st & Final Date: 2010

Division: **Electricals** Sub-Division: **Electricals**

Bill Received No. Dated Divisional / Sub Divisional Cash Book Voucher No..... Dated.....

Schedule Docket No. Head of Account : P 3110

D.R.No

Name of Work : *Providing and Fixing of LED Street Lights in Ward No-15 in Dasarahalli Division*

Name of Contractor and Full Address: **M/S. Praveen Enterprises**

Reference to Agreement No:EE/Ele/DZ/WO/05/17-18 Date:17/05/2017 **Job No 015-17-000020**

Certified that the measurements were taken by me on and recorded of Pages 51 to 51 of 5122/2016-17 measurement Book No. 5/22/16-17 and that the work is satisfactorily executed.

S.Praveen
Contractor

JUNIOR ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore
Officer making the Certificate

Certified that the measurement were taken by me on .....and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

ASST. EXECUTIVE ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore
Sub-Division Officer

II Memorandum of Payment

1)	Total value of work done or supplies made as per account within		
2)	Deduct amount to be held in reserve being .....percent Rs.....		
3)	" Balance		
4)	Deduct Payment:		
	a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No.....	Amount	898080 =
	adjusted towards cash advance recovery of	IT	17965 =
	b) Payments Now made: cost store or other material supplied.	KST	35925 =
	recovery of amount creditable to this/other work	LWF	8980 =
	Amount paid on this bill Cheque / Cash.	CBF	900
5)	Balance being unpaid value of work done held in reserve.	TD	63770 =
6)	Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	Net	834310 =
7)	Net amount due to or from Contractor unadjustments items.		
8)	Advance to Contractor for materials brought to site (as detailed) within.		
9)	Value of Government materials supplied.		
	Total amount adjusted -		

S.Praveen
Contractor's Signature

Audited and admitted for Rs. 834310/898080
Received Rs.....(in words).....
Passed by Cheque for Rs. 834310
by cash and by adjustment of Payment as per memorandum
(Eight lakh thirty four thousand three hundred and ten only)
(in final settlement of all demands)
Witness
1.
2.
by adjustment Rs. 63770
Dated Signature of Contractor
Paid by me by Cheque No..... Dated.....
Cash Rs.....
Dated.....
Initials of Officer making payment

Accounts Superintendent
Exe. Engineer (Ele)
B.B.M.P. Dasarahalli Division

(For use in the Office)

Stamp

Executive Engineer

Sl. No.	Description of item **Name of Work :-** Providing and Fixing of LED Street Lights in Ward No-15 in Dasarahalli Division	Unit
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts	each
2	Supplying & fixing of 32 mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete. Using 32mm dia G.I pipe	Each
3	Wiring for lighting / power circuit using one of pvc insulated 1100v grade stranded aluminum unsheathed wire single core cable in open or concealed system of wiring as per IS - 694 : 19904sq mm	Per Mtr
4	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A.2 X 16 + 1 X 25 SQ.MM	Per Mtr
5	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
6	Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	Each
7	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Each
8	Supplying and fixing miniature circuit breakes on exisiting MCB distribution boards using necessary fixing materials and wiring complete as required. 40-63 Amps SP	Each
9	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	Per Mtr
10	Supplying and fixing hylum brand hand plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F.screws.	SqCm

11	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or plug incase of brick walls and cement plastering damaged portionusing heavy gauge saddles at an interval of 700mm using NF screws.c)32mm dia 2.5mm thick	Per M
12	Supplying and fixing angle,iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)50X50X6 mm	mtr
13	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Per M
14	1.1 KV Pin Insulator	Each
15	2 Pin 45x45x5mm -510mm	Each
16	Supply and installation /fixing/Provision of outdoor type thermoplastic modular panel enclousure with transparent polycarbonate lid, shock proof, IP 65(weather proof) rust proof, water proof, corrosin proof having internally embedded gasket on both id and flap suitable to fix. single phase/energy meter in suitable base plate and having a provision for fuse/ MCB cutout with suitable transparent hinged flap opening MCB along with complete tamper proof SEALING facility. 300x450x214mm.	Each
17	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	Each
18	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	Per Mtr
19	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE	Each
20	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	Per Mtr
	TOTAL	

Certificate

The above said work carried out satisfactory

JUNIOR ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore

ASST. EXECUTIVE ENGINEER (Ele)
Bruhath Bangalore Mahanagara Palike
Dasarahalli Zone, Bangalore.

		96	30.00	2880.00	100	3000.00	
		6	150.00	900.00	19	2850.00	
		996	15.00	14940.00	1000	15000.00	
		30	10.00	300.00	30	300.00	
		30	100.00	3000.00	30	3000.00	
		6	2000.00	12000.00	6	12000.00	
		17	800.00	13600.00	17	13600.00	
		17	200.00	3400.00	17	3400.00	
		17	2500.00	42500.00	17	42500.00	
		0	30.00	0.00	6	180.00	
	0.00			**898080.00**		**900525.00**	

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
		56	12500.00	700000.00	56	700000.00	
		103	150.00	15450.00	103	15450.00	
		495	3.00	1485.00	540	1620.00	
		500	40.00	20000.00	500	20000.00	
		500	2.00	1000.00	500	1000.00	
		6	5000.00	30000.00	6	30000.00	
		6	5500.00	33000.00	6	33000.00	
		6	200.00	1200.00	6	1200.00	
		20	50.00	1000.00	20	1000.00	
		9500	0.15	1425.00	9500	1425.00	